

## REMARKS

Support for the claims 24 through 57 is found in the specification at the locations indicated in the following chart.

5

CLAIM	SUPPORT
Claim 24	page 7 and example 6 at pages 19 and 20
Claims 25 and 26	page 11, lines 18 and 20
Claims 27-30	page 7, lines 10 through 15
Claims 31 through 34	page 6, lines 25 through 30
Claims 35 and 36	page 7, line 10
Claim 37	Page 7 lines 24 through 30
Claim 38	page 10, lines 1 through 4
Claim 39	page 7, lines 7-18
Claim 40	page 8, lines 11-12
Claim 41	page 8, lines 25 through 26
Claim 42	page 5, lines 31 through 32
Claim 43	page 4, lines 1 through 31 and page 5, lines 1 through 32 and page 6, lines 5 through 15 and 25 through 30 and page 7, lines 15 through 23
Claim 44	page 11, lines 15 through 20
Claims 45 through 47	Same location as previously submitted claims 3 through 5
Claim 48	page 5, lines 23 through 26
Claim 49	page 5, lines 26-27 and 17-25
Claims 50 and 51	page 6, lines 25-30
Claim 52	page 15, lines 10-15
Claim 53	page 7, lines 26 through 30
Claim 54	page 10, lines 1 through 5
Claim 55	page 7, lines 17-18
Claim 56	page 8, lines 11-12
Claim 57	page 8, lines 25 through 26

The specification has been amended to delete inaccurate punctuation marks at the following pages: 4, 16, 17, and 19.

10 The Applicant's attorney hereby affirms the election for continued prosecution of claims or the subject matter of claim 1-13. Similar subject matter differing in scope is captured in newly presented claims 24 through 57.

Previously submitted claims 3, 8 and 12 were rejected under 35 U.S.C. 112 first paragraph for the use of the language glass transition temperature. Newly presented claim 45 utilizes the terminology "glass transition temperature" for the adhesive composition. It was noted in the rejection under 112 first paragraph for the previously submitted claims 3, 8 and 12 that the glass transition temperature is known in the art as directed to the property of thermoplastics and rubbers not to a composition having various components. The office action further noted that the glass transition temperature can be calculated by using the fox equation for organic polymers and copolymers. The instant dehydrating agent such as vinyl trimethoxysilane taught at page 17 line 17 is a monomer and monomers (and inorganic fillers) do not have a glass transition temperature. Thus applicant failed to describe adequately how to measure and obtain the glass transition temperature of the adhesive composition.

It is respectfully submitted that glass transition temperatures are known in the art as measurements for compositions such as food and adhesives and polymeric compositions. The enclosed copy of the Power Point presentation entitled "Drying of Sticky Materials - Relevance to Glass Transition Temperature (T<sub>g</sub>)" by Dr. Vhesh Bhandari of the Food, Science and Technology School of Land and Food Sciences University of Queensland, Australia available at [www.fst.uq.edu.au/staff/bbhandari/SprayDryingGroup/KMUTTTThailand.ppt](http://www.fst.uq.edu.au/staff/bbhandari/SprayDryingGroup/KMUTTTThailand.ppt) shows obtaining glass transition temperatures in the chart entitled "Physical Properties of Sugars and Stickiness Behavior For Organic Compounds That Are Sugars" and in the table entitled "Glass Transition Temperature of the Various Food Materials for Other Organics Including Citric Acid, Starch, Ice Cream and Honey". Also, the technical paper entitled "Effects of T<sub>g</sub> and CTE on Semi-Conductor Encapsulants" by Dr. Mark N. Konarski of Loctite Corporation, available at [www.loctite.com](http://www.loctite.com) is also enclosed herewith which indicates obtaining glass transition temperatures for epoxy encapsulating compositions for electric circuit boards. These epoxy compositions contain numerous ingredients. Also, a copy of European patent publication 0196749 is enclosed herewith indicating the

claiming of the glass transition temperature for an adhesive composition and a description in the specification that the glass transition temperature is for the adhesive composition. Also, a search was done of the U.S. Patent and Trademark Office database for specifications having the word string "glass transition" and claiming the word "adhesive" and the word string "glass transition" and 985 issued patents were listed. Another search was done on the same database for patents having specifications with the word string "glass transition" and claims having the word "adhesive" and the word string "glass transition" and also specifications having the words either "measure the glass" or "measure of the glass" which uncovered one patent, U.S. Patent, 4,814,373. This latter search was altered by modifying the last section of the search for patents having specifications using the word string "measurement of the glass" and uncovered the following fourteen patents.

PAT. NO. Title

- 1 6,605,347 Pressure-sensitive adhesive composition and pressure-sensitive adhesive sheet thereof
- 2 6,558,791 Heat-resistant adhesive sheet
- 3 6,498,203 Rubber-erasable aqueous ink for writing material composition and writing materials using the same
- 4 6,372,080 Process for fabricating a crack resistant resin encapsulated semiconductor chip package
- 5 6,248,613 Process for fabricating a crack resistant resin encapsulated semiconductor chip package
- 6 6,228,500 Adhesive composition and precursor thereof
- 7 6,057,384 Latex polymer blends for improving the permanence of ink-jet inks
- 8 6,046,072 Process for fabricating a crack resistant resin encapsulated semiconductor chip package
- 9 5,990,202 Dual encapsulation technique for preparing ink-jets inks
- 10 5,461,087 Adhesive and double-sided adhesive tape
- 11 5,089,346 Heat resistant adhesive composition and bonding method using the same
- 12 4,624,893 Pressure-sensitive adhesive tapes or sheets
- 13 4,500,575 Hot-melt adhesive of a copolyester of a dibasic acid with a polyhydric alcohol

Therefore, it is respectfully submitted that those skilled in the art are well aware of ways of determining glass transitions of compositions ranging from those full of ingredients such as ice cream to those of epoxy compositions for encapsulating integrated circuits or circuit boards.

Previously submitted claims 1 through 13 were rejected under 35 U.S.C. 112 second paragraph as being indefinite for the recited terminology "the clarity of claim 1." and also for the word "about" in claims 3, 6-9 and 12 as indefinite in regards to the terminology "less than". In claims in newly presented claims 24 through 57 using similar terminology to that of previously claims 3, 6-9 and 12

have not used the term "about" in relation to the words "less than". In regards to the use of the word "the clarity" similar words are used in claim 43 as "interfere with the production of a clear adhesive". It is respectfully submitted that this latter terminology has antecedent basis for claim 43.

5 Previously submitted claims 10-13 were rejected under U.S.C. 102(b) as anticipated by or in the alternative under 35 U.S.C. 103(a) as obvious over the product brochure entitled MS Polymer Silyl of Kaneka Corporation. It is respectfully submitted that the two independent claims, claim 24 and claim 43 and claims dependent therefrom are novelty and unobviousness from the  
10 teaching of this reference. Claim 24 has a filler which includes fumed silica with a surface area of less than 200 meters squared per gram in addition to the polymer or copolymer with reactive silicone end groups and the dehydrating agent. Always having the presence of such a filler which is fume silica is not taught or suggested by the Kaneka reference. Also for claim 43, there is no  
15 teaching or suggestion in the Kaneka reference to have the filler of fume silica with a certain surface area, or a clear filler with a certain surface area and a viscosity range for the adhesive.

Previously claims 1-13 were rejected under 35 U.S.A. 103(a) as obvious over the product brochure "MS Polymer Ssilyl" of Kaneka Corporation in view of  
20 the Smith Jr. et. al. U.S. Patent 4,308,372, Staiger et al (U.S. Patent 5,304,621) and/or Imai et al (U.S. Patent 4,760,123). It is noted in the office action that fillers are generally taught at the bottom of page 1 of the product brochure and the other patents used in the rejection use the fumed amorphous silica in moisture curable compositions having copolymer with reactive silicone and  
25 groups. For example, it is noted in the office action that Staiger et al referenced taught fumed silica, HDK, at column 18 line 7 which was also taught in the specification of the captioned application at page 6 line 22. A conclusion of the office action was it would be obvious to one skilled in the art to take the fumed silica of Smith, Staiger or Maimai references and use it as a filler for the teaching  
30 of the product brochure with the particular polymer or copolymer in a moisture curable composition.

It is respectfully submitted that none of the aforecited references teach the polymer or copolymer with the reactive silicon groups with the particular type of filler and the dehydrating agent as an adhesive composition.

It is respectfully submitted that the newly presented claims are in condition  
5 for allowance and reconsideration and allowance of them is earnestly solicited.

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Respectfully submitted,

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